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THE TAXONOMIC HISTORY OF THE NEOTROPICAL CRICETID GENERA *HOLOCHILUS, NECTOMYS, SCAPTEROMYS, MEGALOMYS, TYLOMYS* AND *OTOTYLOMYS*

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This review, the third of a series of historical papers on the rats of South and Central America, deals with those genera which contain the larger rat-like species. Although not very closely related, they are conveniently handled in a single article.

HISTORICAL STATEMENT

HOLOCHILUS Brandt

1819. Desmarest described (p. 62) *Mus brasiliensis* (n. sp.), collected by Auguste F. C. P. de Saint-Hilaire, a botanist who traveled over most of Brazil. The credit given Geoffroy was probably for the unpublished name *brasiliensis.*

1820. Desmarest (p. 305) opined that his *brasiliensis* was the same as *angouya* (an *Oryzomys*) and treated it as a synonym. But he had probably never seen a specimen of *angouya,* which he had previously based upon the RAT TROISIÈME of Azara.

1827. Brants described (p. 137) *Mus vulpinus* (n. sp.) and (p. 139) *Mus physodes* (n. sp.), giving credit for both names to Lichtenstein.

1830. Lichtenstein further described (Pl. XXXIII) *Mus vulpinus* and (Pl. XXXIV) *Mus physodes.* [In 'Einleitung zum siebenten Heft,' Lichtenstein clearly gave Brants credit for prior publication. This work bears only the inclusive dates 1827–1834, but Trouessart gives 1830 for *Scapteromys tomentosus* Lichtenstein.]

1835. Brandt erected (p. 428) *Holochilus* new subgenus of *Mus,* including in it *Mus* (*Holochilus*) *leucogaster* (n. sp.) which was synonymized by Trouessart, 1898, with *physodes,* and (p. 430) *Mus* (*Holochilus*) *anguya* (n. sp.).

1839. Waterhouse described (p. 58) a rat which he identified as *Mus brasiliensis* from Bahia Blanca, thinking it equal to *brasiliensis* Desmarest. He stated that he had examined what he believed to be the original specimen of *brasiliensis* in Paris, and took care to point out that *angouya* Desmarest (an *Oryzomys*), confused by some authors with *brasiliensis*, was quite a different animal. He thought the description of *anguya* Brandt more like *brasiliensis*. With the erection (p. 75) of his *Hesperomys*, *brasiliensis* became included therein.

1841. Lund wrote (p. 279) of "*vulpinus*," giving measurements and description of color. His animal was apparently an *Oryzomys*.

1842. Wagner re-diagnosed (p. 14) *Holochilus* in detail, treating it as a full genus, and discussed the species which ought to be included in it. He described *Holochilus sciureus* (n. sp.). He was later convinced (p. 288) that the "*brasiliensis*" of Waterhouse belonged in *Holochilus*.

1843. Wagner placed (p. 536) *physodes* with *auritus* (a *Reithrodon*) and *orobinus*, *subflavus* and *angouya* (none of them *Holochilus*) in a subgeneric group of *Hesperomys* which he gave no name but described as having "tarsi mediocres, auriculae majusculae nec non cauda elongata nudiuscula." In a footnote (p. 544) he wrote that *vulpinus* Lichtenstein and *vulpinus* Lund were distinct from each other. He treated (p. 548) *Holochilus* as a full genus, listing in it *brasiliensis*, *leucogaster* (Wagner), *canellinus*, *sciureus*, and *vulpinus*. He remarked in numerous footnotes upon the relationships of these species.

1844. Pictet and Pictet wrote of (p. 53) *Mus brasiliensis* Geoffroy. They thought (p. 80) that *leucogaster* Brandt might in reality be a rat imported from the Old World.

1845. Wagner described (p. 147) "*Hesperomys leucogaster*," which from its color and rather large size may be referable to *Holochilus*. Judging by the proportions of the measurements given in each case, *leucogaster* Wagner is quite distinct from *leucogaster* Brandt.

1847. Gay described (p. 108) and figured (Pls. VI and VII) *Mus lutescens* (n. sp.), in reality one of the Old World rats (see Wolffsohn, 1910).

1850. Wagner added information (p. 306) about his *leucogaster* and described *Hesperomys russatus* (n. sp.).

1854. Burmeister in the 'Systematische Uebersicht' made *Holochilus* (including *Nectomys*) and *Calomys* subgenera of *Hesperomys*. Under the former he described *robustus*, n. sp. (a *Nectomys*), and included *vulpinus* (Lichtenstein), *squamipes*, and *physodes*. He placed *brasiliensis* of Waterhouse in the synonymy of *vulpinus*, *sciureus* under *squamipes*, and *russatus* under *physodes*.

Leucogaster (Wagner) was put in *Calomys*, and *leucogaster* (Brandt) was compared (p. 171) with *physodes*.

1855. Burmeister (1854, p. 5) treated *Holochilus*, plus *Nectomys*, as a sub-group of *Hesperomys* and remarked upon *robustus* (a *Nectomys*), stating that *robustus* was the rat which the Pictets (1844) referred to *brasiliensis* and probably the *aquaticus* of Lund. He also discussed *vulpinus*, to which he referred the *brasiliensis* of Waterhouse; *squamipes*, under which he placed *sciureus* Wagner, *anguya* Brandt and *canellinus* Wagner; and *physodes*, with which he synonymized *russatus* Wagner.

1866. Lilljeborg made (p. 17) *Holochilus* (including *Nectomys*) a full genus.

1867. Fitzinger listed (p. 89) under *Holochilus: brasiliensis*, *robustus* (a *Nectomys*), *leucogaster*, *russatus*, *physodes*, *squamipes* (a *Nectomys*), *canellinus*, *sciureus*, *vulpinus*, and *arviculoides* (a *Zygodontomys*).

1872. Hensel dispensed with (p. 32) all subgeneric names, listing instead all South American Cricetids under *Hesperomys* (*sensu lato*). The only *Holochilus* dealt with was *vulpinus*, which he distinguished from other rats by the vague character: "cheek-teeth without cusps, lacking enamel."

1876. Alston treated (p. 84) *Holochilus* as a full genus, but seemingly included *Nectomys* in it.

1879. Burmeister listed (p. 210) *vulpinus* under *Hesperomys* (*Holochilus*).

1882. Thomas recorded (p. 101) specimens of *apicalis* (*Nectomys*) under "*Holochilus* (*Nectomys*)."

1883. Pelzeln commented (p. 67) upon *leucogaster* (Wagner) obtained by Natterer. He listed (p. 71) *russatus*, *physodes*, and (p. 73) *brasiliensis*.

1884. Thomas treated (p. 448) *Holochilus* (including *Nectomys*, p. 451) as a full genus.

1885. Trouessart, in course of discussing the status of *Megalomys*, reviewed (pp. 1–18) the inter-relationships of *Holochilus* and *Hesperomys*.

1887. Winge placed (p. 21) *vulpinus* under *Sigmodon*. (Thomas, 1897, p. 495, stated that Winge's animal was *sciureus*.)

1894. Ihering listed *brasiliensis*, *physodes*, *leucogaster*, and *sciureus*, but his synonymy and identifications appear to be open to question.

1896. Thomas listed (p. 1020) *Holochilus* as a full genus, including in it *Nectomys*.

1897*b*. Thomas described (p. 495) *Holochilus nanus*, n. sp., comparing it with *sciureus*. He added that *Nectomys* and *Holochilus* were really distinct genera. He proposed *darwini*, new name for the *brasiliensis* of Waterhouse. One or both of the names *vulpinus* and *canellinus* were thought applicable to the species of the Parana and Uruguay River systems. *Brasiliensis* Geoffroy (Desm. 1819) and *leucogaster* Brandt (1835) could not then be identified.

1898. Trouessart moved *Megalomys* into *Holochilus* as a separate subgenus. He listed in true *Holochilus: brasiliensis* Desmarest, *vulpinus*, *darwini*, *sciureus*, *canellinus*, *nanus*, *physodes*, *russatus*, and *lutescens*.

Anguya Brandt, though of earlier date, was suppressed in favor of *canellinus* Wagner. This was probably done on account of an idea that *Mus* (*Holochilus*) *anguya* Brandt was pre-occupied by *Mus angouya* Desmarest. However, since the rule defining homonyms ('Int. Rules Nomencl.,' 1926, Art. 35) does not apply to *ou* and *u*, *Mus angouya* Desmarest cannot now be considered as preoccupying *Mus anguya* Brandt, and *Orzomys angouya* and *Holochilus anguya* are valid names connoting perfectly distinct animals. *Leucogaster* Brandt was made a synonym of *physodes*, another irregularity; *leucogaster* Wagner was omitted, and *leucogaster* Pictet was made a synonym of *Mus* (*Epimys*)

rattus. *Vulpinus* Lund (1841) was placed (p. 421) in the synonymy of *subflavus* Wagner.

1900. Phillippi described (p. 29) *Mus simpsoni* (n. sp.), which he characterized as the largest rat in Chile, but which may possibly only be a form of *Rattus*. He compared it with *darwini* ("*brasiliensis* Geoffroy") and *lutescens*. He also described *Mus agilis* (n. sp.), comparing it with *lutescens*. I do not consider *agilis* a *Holochilus;* but Trouessart lists it (1905, p. 412) with a query.

1901*a*. Thomas described (p. 149) *Holochilus guianæ*, n. sp.

1902. Miller and Rehn (p. 89) designated the type of *Holochilus* as *leucogaster* Brandt.

1904. J. A. Allen described (p. 330) *Holochilus venezuelæ*, n. sp.

1905. Trouessart listed in *Holochilus* (p. 411): *brasiliensis, vulpinus, darwini, sciureus, guianæ, canellinus, nanus, physodes, physodes leucogaster, russatus, lutescens, simpsoni* and questionably *agilis*. The main change from his list of 1898 was the recognition of *leucogaster* (Brandt). He removed (p. 415) *Megalomys* from *Holochilus*.

1906*a*. Thomas described (p. 446) *Holochilus chacarius*, n. sp., and (p. 447) *Holochilus balnearum*, n. sp.

1910 Wolffsohn quoted (p. 96) from a letter in which Thomas stated that *Holochilus lutescens* was nothing but *Mus rattus*. "I have seen the type in Paris." (See Gay, 1847.)

1915. Osgood described (p. 188) *Holochilus amazonicus*, n. sp. He remarked upon the relationships of *amazonicus* and upon the geographical range of *Holochilus*.

1921. Thomas described (p. 226) *Holochilus incarum*, n. sp. He doubted whether *guianæ* and *amazonicus* should have been separated from *sciureus*.

1927. Thomas wrote under *sciureus* (p. 369): "I now see no sufficient reason for distinguishing the Peruvian Red Water-rat from that of the Lower Amazon."

1928. Thomas wrote (p. 260): "As time goes on and material increases, I am more and more convinced of the essential identity of all the *Holochilus* water-rats of the whole of the Amazonian drainage area, from Pernambuco to Peru, Guiana to Bolivia, and equally that of the Rio San Francisco." He considered that due to aquatic habits

the "hind-foot length" of water-rats must be used with caution. He thought with Winge that the dentition might indicate some affinity with *Sigmodon*.

NECTOMYS Peters

1827. Brants described (p. 138) *Mus squamipes* (n. sp.), giving Lichtenstein credit for the name.

1841. Lund wrote of (p. 279) *Mus aquaticus*, describing its swimming feet, measurements and color. The description fits *Nectomys*.

1843. Wagner placed (p. 515–516) *squamipes* with *Scapteromys tomentosus*, *Oxymycterus rufus* and some *Oryzomys* under a heading: *Hesperomys* (*incertæ sedis*).

1854. Burmeister (p. 164) described *Hesperomys* (*Holochilus*) *robustus* (n. sp.) and kept *squamipes* in *Hesperomys* (*Holochilus*).

1855. Burmeister wrote (1854, p. 5) on *Holochilus* plus *Nectomys*, referring *aquaticus* (Lund 1841) to his *Holochilus robustus*.

1860. Peters erected (p. 135) *Nectomys*, n. g., to contain *squamipes*. He described *Nectomys apicalis*, n. sp.

1866. Lilljeborg in his system included (p. 17) *Nectomys* in *Holochilus*.

1867. Fitzinger gave (p. 84) only *aquaticus* Lund under *Nectomys*. He listed *squamipes* in *Holochilus*.

1872. Hensel, omitting subgeneric terms, discussed (p. 34) only *Hesperomys squamipes*.

1872. Liais wrote (p. 507) concerning a form of *Nectomys* which he called *Potamys brasiliensis*.

1879. Burmeister stated (p. 212) "*Mus aquaticus* Lund is a true *Nectomys* and identical with *N. squamipes* Licht. (*H. robustus* Burm.)."

1882. Thomas placed *apicalis* under "*Holochilus* (*Nectomys*)."

1883. Pelzeln described (p. 73) *Hesperomys rattus* (n. sp.), asserted by Thomas (1897) to be *Nectomys*.

1886. Leche concluded (p. 690) that *apicalis* was a synonym of *squamipes*.

1887. Winge compared (p. 57) *squamipes* with "*Calomys laticeps*," treating *Nectomys* as a full genus.

1893. Allen and Chapman described (p. 209) *Nectomys palmipes*, n. sp.

1896. Thomas included (p. 1020) *Nectomys* in the full genus *Holochilus.*

1897*a*. Thomas stated (p. 486): "*Nectomys* should be restored to full (generic) rank at 74*a*" (in his 'Genera of Rodents,' 1896).

1897*b*. Thomas discussed (p. 497) *Nectomys*, stating that *Hesperomys rattus* Pelzeln was a *Nectomys* and reviewing other existing species. He described *Nectomys grandis*, n. sp., *Nectomys magdalenæ* n. sp., and *Nectomys fulvinus*, n. sp.

1897*c*. Thomas described (p. 546) *Nectomys saturatus*, n. sp., and (p. 547) *Nectomys russulus*, n. sp.

1897. J. A. Allen erected (p. 38) *Sigmodontomys*, n. g., with type *Sigmodontomys alfari*, n. sp., based upon a single specimen.

1898. Trouessart listed (pp. 521–2) *squamipes, rattus, apicalis, palmipes, grandis, magdalenæ*, and *fulvinus*. *Aquaticus, robustus* and *brasiliensis* Pictet were placed in the synonymy of *squamipes*. He listed *Sigmodontomys* Allen separately.

1899*a* Thomas described (p. 41) *Nectomys garleppii*, n. sp.

1901*b* Thomas described (p. 250) *Nectomys esmeraldarum*, n. sp. He considered that *esmeraldarum, russulus* and probably *Sigmodontomys "alfaroi"* Allen formed a special group less adapted for aquatic life than typical *Nectomys*.

1903. Thomas described (p. 238) *Nectomys squamipes mattensis*, n. subsp.

1905. Thomas described (p. 586) *Nectomys dimidiatus*, n. sp. He stated: "Allen's *Sigmodontomys alfari* and the closely allied *Nectomys russulus* are forms with more *Oryzomys*-like fur; but their exact generic position is not at present easy to define, owing to want of specimens with unworn teeth."

1905. Trouessart listed (p. 412) *squamipes, rattus, garleppi, palmipes, grandis, saturatus, magdalenæ, fulvinus, russulus*, and *esmeraldarum*.

He again listed (p. 427) *Sigmodontomys* Allen.

1908. J. A. Allen described (p. 655) *Oryzomys ochraceus*, n. sp. (Removed later, 1916, to *Nectomys*.)

1910. Thomas described (p. 185) *Nectomys squamipes melanius*, n. subsp.

1911. Miller designated (p. 180) *squamipes* as type of *Nectomys*.

1913. Goldman described (p. 7) *Nectomys alfari efficax*, n. subsp. He contrasted it with *Sigmodontomys alfari* and *Nectomys esmeraldarum* and concluded that *Sigmodontomys* should be placed under *Nectomys*.

1913. Thomas described (p. 570) *Nectomys hammondi*, n. sp. He wrote: ". . . *Nectomys* falls into two groups, firstly the . . . species related to *N. squamipes* (*N. apicalis, garleppi, fulvinus*, etc., etc.,) . . . and secondly a few isolated species . . . showing their relationship to the ordinary *Nectomys* by their glossy fur and heavily ridged skull." In these he included *russulus, hammondi, esmeraldarum, dimidiatus*, and *saturatus*.

1914. Hollister described (p. 104) *Nectomys squamipes pollens*, n. subsp.

1914. Osgood suggested (p. 160) that Guiana rather than Quito might well be type locality of *N. fulvinus* Thomas.

1916. Goldman transferred (p. 127) *Oryzomys ochraceus* Allen to *Nectomys* as a synonym of *Sigmodontomys* (=*Nectomys*) *alfari* Allen.

1928. Thomas wrote (p. 260): "In the genus *Nectomys* there seems to be a greater tendency for the development of local races than is the case with *Holochilus*." He thought that *Nectomys* showed some relationship with *Rhipidomys*.

SCAPTEROMYS Waterhouse

1830. Lichtenstein described (Pl. XXXIII) *Mus tomentosus* (n. sp.).

1837. Waterhouse described *Mus tumidus* (n. sp.) and erected (p. 20) *Scapteromys* new subgenus of *Mus* to contain *tumidus*, making *tumidus* the type of the genus by monotypy.

1839. Waterhouse further described (p. 57) *tumidus*. When he proposed (p. 75) his blanket-genus *Hesperomys*, he ignored his own name *Scapteromys* but included *tumidus*.

1841. Lund spoke of (p. 276) *Mus principalis* and *fossorius*: ". . . . two recent species which, however, I only find as skeletons in caves. One I call *Mus principalis*, since it exceeds all other species in size; the other *Mus fossorius*, because it shows such strong development of the crests of the humerus that it must have ability to burrow in the ground highly developed."

1841. Wagner, who apparently had not yet heard of Waterhouse's new genus *Hesperomys*, suggested (p. 125) in a footnote that *Scapteromys* probably belonged in *Reithrodon*.

1843. Wagner discussed (pp. 515–516) *tumidus* under *Hesperomys* (*Scapteromys*). *Tomentosus*, with *squamipes* (a *Nectomys*), *rufus* (an *Oxymycterus*), and several *Oryzomys*, was located in a group under the caption "*incertæ sedis*."

1859. Baird combined (p. 453) *Scapteromys* with "*Oxymicterus*" to make a single genus *Oxymicterus*.

1860. Peters remarked (p. 135) that *Mus tomentosus* constituted a second species of the subgenus *Scapteromys*.

1867. Fitzinger, in addition to *tumidus*, placed (p. 80) *dasytrichos* Wied (an *Oxymycterus*) in *Scapteromys* (made a full genus); but he put *tomentosus* in *Habrothrix*.

1872. Hensel, omitting subgeneric names, discussed (p. 46) *Hesperomys tumidus*.

1884. Thomas considered (p. 449) *Scapteromys* a subgenus of *Hesperomys* (*sensu lato*).

1887. Winge described (p. 39) *Scapteromys labiosus*, n. sp., treating *Scapteromys* as a full genus. He gave (p. 42) a detailed description of *principalis* Lund as well as that of a fossil form, *fronto*, n. sp.

1896. Thomas listed (p. 1020) *Scapteromys* as a full genus.

1898. Trouessart listed (p. 534) in *Scapteromys: tumidus*, *tomentosus*, *labiosus*, and *principalis*.

1905. Trouessart made (p. 431) no changes in his list of 1898.

1914. Ribeiro described (p. 37) *Scapteromys gnambiquaræ*, n. sp., doubtfully distinct from *principalis* Lund and (p. 39) *Scapteromys modestus*, n. sp., "resembling *Scapteromys labiosus* Lund." (Winge, not Lund, described *labiosus*.) No type locality was given nor was any type specimen named for either species.

1917. Thomas stated (p. 96) that he thought *Scapteromys tomentosus* merely a black form of the grayer *tumidus*.

1920. Thomas discussed (p. 477) the *Scapteromys* of the Parana Delta. He modified his remarks of 1917 and cited Matschie as having informed him that *tomentosus*, which he now thought quite distinct, was from near Maldonado. He proposed *Scapteromys aquaticus*, n. sp., for the delta form.

1929. Sanborn (p. 158) quoting Thomas (1920) suggested that *tumidus* and *tomentosus* may in time prove to be synonyms. But in the same article the latter said "In size *tomentosus* would appear to exceed considerably both *tumidus* and the delta form, as its hind foot, including claws, is said to be 2 inches in length." At that time, therefore, Thomas regarded them as distinct species.

1932. Gyldenstolpe described *Scapteromys chacoensis*, n. sp. He compared it with the fossil form *fronto* Winge and mentioned that a cotype of *gnambiquaræ* Ribeiro was now in the British Museum.

MEGALOMYS Trouessart

1658. DeRochefort wrote (p. 124) of "Les rats musqués, que nos francais appellent Piloris."

1667. Père du Tertre remarked upon these animals. [I have not seen his account.]

1763. Buffon spoke (p. 3) of the "piloris."

1771. Pennant wrote (p. 247) of *Cavia moschata.*

1777. Zimmermann discussed (p. 509) *Castor piloris.*

1778. Pallas wrote (p. 91) under *Mus* (*Pilorides*) a composite description based partly upon a rodent from Ceylon and partly upon the West Indian piloris.

1827. Desmarest employed (p. 483) *Mus pilorides* to describe a rat "peu plus petite que le surmulot" and considered it altogether distinct from the piloris of de Rochefort.

1829. Fischer described (p. 360) *M*[*us*] *desmarestii* (n. sp.). He had previously characterized *M. pilorides* Pallas.

1830. Geoffroy St. Hilaire and Cuvier published a very important colored figure, accompanied by a less important description of the "pilori."

1843. Wagner (p. 444) listed "*Mus Pilorides* Pallas" in an appendix under *Mus.*

1881. Trouessart stated (p. 356) that after examining the mounted and alcoholic specimens in the Paris Museum, sent many years before by M. Plée from Martinique, he had no doubt that they were members of the genus *Hesperomys* (*sensu lato*) and erected *Megalomys*, n. subg., with type "*Mus pilorides* (Desmarest)," placing

it near *Nectomys*. Additional specific characters and measurements were given.

1884. Thomas said (p. 450): "*Megalomys* Trouess. founded on *H. pilorides*, Pall., seems to me to fall within the genus *Holochilus*, Bdt., and not to be a true *Hesperomys* at all."

1885. Trouessart took exception (Article 5) to *Thomas's* (1884) statement. He listed in detail the five specimens in the Paris Museum, published a plate showing the skull (dorsal and lateral views), teeth, and feet of *Megalomys*, compared the anatomy in detail with that of other South American genera, and concluded by giving (p. 13) a new diagnosis of the subgenus.

1898. Trouessart listed (p. 520) *Megalomys* as a subgenus of *Holochilus*. The only species given was *pilorides* Pallas.

1901. Major stated (p. 205) that one of the cotypes "from Martinique, presented by Plée to the Paris Museum, has found its way to the Leyden Museum, and its skull was kindly lent to me by Dr. Jentinck." He had also before him B.M. 53.12.16.4 from Santa Lucia and a fossil species which he did not describe. He concluded from this material that the rats in question belonged in the genus *Oryzomys*, and after listing the synonymy of "*Oryzomys piloris* (Zimmerm.)" described *Oryzomys luciæ*, n. sp., with the specimen mentioned above as type.

1902. Miller and Rehn placed (p. 89) *pilorides* in *Holochilus*, full genus.

1902. J. A. Allen, discussing the Piloris, said (pp. 20–21): "If the name *Mus pilorides* given to this animal by Desmarest in 1826 is preoccupied by *Mus pilorides* Pallas, 1786, as seems to be the case, the proper name of the Rat musqué, or Piloris, will be *Mus desmaresti* of Fischer, 1829, = *Megalomys desmaresti* (Fischer), or *Oryzomys desmaresti* (Fischer) for those who believe, with Mr. Forsyth Major, that *Megalomys* is not separable from *Oryzomys*."

1903. Trouessart retracted his belief that *Megalomys* and *Holochilus* were closely allied. He opposed entirely Major's view that *Megalomys* was related to *Oryzomys*, and, considering his own name *Megalomys* preoccupied by *Megamys* Laurillard, substituted *Moschomys*, new name.

He stated that *pilorides*, being a composite name based upon two distinct species, ought to be dropped; that *piloris* and *moschata* were unavailable; but that *desmaresti* Fischer might be employed. In conclusion he listed three species: *Moschomys desmaresti* (Fischer), *M. luciæ* (Major), and *M.* species (Major's unnamed fossil).

1904. Poche, referring to Trouessart's discussion of *Megamys* and *Megalomys* (1903), cited the international nomenclature rules regarding preservation of the original spelling of a name, and concluded that *Megalomys* was *not* preoccupied by *Megamys*, so that *Moschomys* would have to be set aside, and *Megalomys* reinstated.

1904. Elliot, ignorant of Poche's note, found (p. 270) *Moschomys* Trouessart preoccupied by *Moschomys* Bellberg and proposed *Moschophoromys* instead.

1905. Trouessart, having several times changed his views regarding the status of this genus, now gave it (p. 415) full rank and set it well away from *Holochilus*. He proposed *majori*, n. sp.—a *nomen nudum*—for the unnamed fossil species mentioned by Major (1901), and listed also *desmaresti* and *luciæ*.

1911. G. M. Allen followed (pp. 415–16) Trouessart's arrangement (1905) and recited the known history of each species.

1911. Miller placed (p. 178) *Megalomys* next to *Tylomys*. [The plate by Geoffroy and Cuvier (1830), portraying the living animal, suggests *Tylomys* in certain respects—notably in the color pattern, but the tail is very different. I have compared the skulls of several genera, *Tylomys*, *Ototylomys*, *Holochilus*, and *Nectomys*, with the figures given by Trouessart (1885). Unfortunately, he neglected to give a palatal view, so I could not learn whether or not *Megalomys* possesses very large palatal foramina as in *Tylomys*. Its teeth (separately drawn) are very different from those of *Tylomys*, and I can only conclude that it represents a thoroughly distinct genus.]

1926. Hopwood described (p. 328) and figured (Pl. XII, figs. 1–2) *Megalomys audreyi*, n. sp. This represented the hitherto undescribed fossil of Major (1901) and *majori* (*nomen nudum*) Trouessart. From the wording (p. 330), *luciæ* would appear to be truly a *Megalomys* and not an *Oryzomys*.

TYLOMYS Peters

1866. Peters erected (pp. 404–409) *Hesperomys* (*Tylomys*), n. subg., to contain *nudicaudatus*, n. sp. He figured the skull with great care.

1873. Gray erected (p. 417) *Neomys*, n. g., to contain *Neomys panamensis*, n. sp., whose skull he figured.

1880. Alston placed (p. 150) *Neomys* Gray in the synonymy of *Tylomys*.

1890. J. A. Allen further described (p. 210) *nudicaudatus* (from Costa Rica).

1893. Allen and Chapman described (p. 211) *Tylomys couesi*, n. sp. (See Allen and Chapman, 1897.)

1897. Allen and Chapman removed (p. 29) *couesi* (1893) from *Tylomys* to *Rhipidomys*.

1898. Trouessart listed (p. 520) *nudicaudatus*, *couesi*, *panamensis* and "*carri*." The last was an error (p. 1324), *carri* referring not to *Tylomys* but to *Thylamys*, a murine opossum.

1899. Thomas described (p. 278) *Tylomys miræ*, n. sp., and *Tylomys watsoni*, n. sp.

1901. Merriam described (p. 560) *Tylomys tumbalensis*, n. sp., and (p. 561) *Tylomys bullaris*, n. sp.

1902. Miller and Rehn designated (p. 88) *nudicaudatus* type of *Tylomys*.

1905. Trouessart listed (p. 411) *miræ*, *nudicaudatus*, *panamensis*, *tumbalensis*, *bullaris*, and *watsoni*.

1916. Anthony described (p. 366) *Tylomys fulviventer*, n. sp.

1920. Goldman remarked upon (p. 90) *panamensis*, *watsoni*, and *fulviventer*.

OTOTYLOMYS Merriam

1901. Merriam erected (p. 561) *Ototylomys*, n. g., to contain *Ototylomys phyllotis*, n. sp., and *Ototylomys phyllotis phæus*, n. subsp. He contrasted the new genus with *Tylomys*, and also with *Xenomys*, *Peromyscus*, and *Neotoma*.

1905. Trouessart listed (p. 410) *phyllotis* and *phyllotis phæus*.

1908. J. A. Allen described (p. 658) *Ototylomys fumeus*, n. sp.

1909. Thomas described (p. 669) *Ototylomys guatemalæ*, n. sp.

1931. Osgood described (p. 145) *Ototylomys phyllotis australis*, n. subsp. He suggested that *phyllotis*, *fumeus*, and *guatemalæ* differ in characters of only subspecific importance.

PRESENT STATUS OF THE GENERA

Genus *Holochilus* Brandt	Type by subsequent designation (Miller and Rehn, 1902): *Mus* (*Holochilus*) *leucogaster* Brandt
Genus *Nectomys* Peters	Type by subsequent designation (Miller, 1911): *Nectomys squamipes* Brants
Genus *Scapteromys* Waterhouse	Type by monotypy: *Scapteromys tumidus* Waterhouse
Genus *Megalomys* Trouessart	Type by subsequent designation (Allen, 1902): *Megalomys desmarestii* (Fischer)
Genus *Tylomys* Peters	Type by monotypy: *Tylomys longicaudatus* Peters
Genus *Ototylomys* Merriam	Type by monotypy: *Ototylomys phyllotis* Merriam

List of Specific and Subspecific Names[1] with Type Localities

Holochilus	
brasiliensis (Desmarest)	Brazil
vulpinus (Brants)	Brazil (Brants); Uruguay, coll. by Sello (Lichtenstein)
physodes (Brants)	São Paulo, Brazil
leucogaster (Brandt)	Brazil
anguya (Brandt)	Brazil
sciureus Wagner	Rio San Francisco, Brazil
leucogaster (Wagner) (preoccupied)	Woods of Ypanema, São Paulo, Brazil
russatus (Wagner)	Ypanema, São Paulo, Brazil
nanus Thomas	Marajó Island, lower Amazon, Brazil
darwini Thomas	Bahia Blanca, Argentina
simpsoni (Philippi)	Santo Domingo Island, W. Patagonia
guianae Thomas	Kanuku Mts., British Guiana
venezuelæ Allen	El Llagual, Venezuela
chacarius Thomas	Chaco, one league NW. of Concepcion, Paraguay
balnearum Thomas	Bañado de San Felipe, Tucuman, Argentina
amazonicus Osgood	Itacoatiara, R. Amazon, Brazil
incarum Thomas	Santa Ana, near Cuzco, Peru
Nectomys Peters	
squamipes squamipes (Brants)	Brazil
squamipes mattensis Thomas	Santa Ana de Chapada, Sierra de Chapada, 30 miles NE. of Cuyaba, Matto Grosso, Brazil
squamipes pollens Hollister	Sapucay, Paraguay
squamipes melanius Thomas	Lower Essequibo R., 12 miles from mouth, British Guiana

[1]Since no works of a revisional nature have been published on these genera, it has been thought advisable to list all specific and subspecific names, even though some already have been and others unquestionably will be placed in synonymy.

aquaticus (Lund)	Lagoa Santa, Brazil
robustus (Burmeister)	Northeastern Brazil
apicalis Peters	Guayaquil, Ecuador
rattus (Pelzeln)	Marabitanas, Rio Negro, Brazil
palmipes Allen and Chapman	Princestown, Trinidad
grandis Thomas	Concordia, Medellin, Colombia
magdalenae Thomas	Near Rio Magdalena, West Cundinamarca, Colombia
fulvinus Thomas	"Believed to be Quito," but may be Cayenne
saturatus Thomas	Ibarra, northern Ecuador
russulus Thomas	Valdivia, Colombia; 1200 metres
alfari alfari (Allen)	Jimenez, Costa Rica
alfari efficax Goldman	Cana, Eastern Panama
garleppii Thomas	Ocabamba, Cuzco, Peru
esmeraldarum Thomas	St. Javier, Prov. Esmeraldas, W. Ecuador
dimidiatus Thomas	Escondido R., 3 miles below Rama, Nicaragua
ochraceus (Allen)	Rio Grande, south of Tuma, Nicaragua
hammondi Thomas	Mindo, NW. of Quito, Ecuador
Scapteromys Waterhouse	
tomentosus (Lichtenstein)	Wooded parts of Uruguay
tumidus (Waterhouse)	Maldonado, Uruguay
principalis (Lund)	Lagoa Santa, Brazil
fossorius[1] (Lund)	Lagoa Santa, Brazil
labiosus Winge	Lagoa Santa, Brazil
gnambiquarae Ribeiro	Range: "In the campos of Chapadao, from Ultimo Acampamento northward"
modestus Ribeiro	Range: Caceres and Porto Espiridiao, Matto Grosso, Brazil
aquaticus Thomas	Isla Ella, Parana Delta
chacoensis Gyldenstolpe	Rio de Oro, Chaco Austral, Argentina
Megalomys Trouessart	
desmarestii (Fischer) (=*pilorides* Pallas)	Martinique
luciae (Major)	St. Lucia
Tylomys Peters	
nudicaudatus Peters	Guatemala
panamensis (Gray)	Panama
mirae Thomas	Paramba, Rio Mira, N. Ecuador
watsoni Thomas	Bogava, Chiriqui, NW. Panama
tumbalensis Merriam	Tumbala, Chiapas, Mexico
bullaris Merriam	Tuxtla, Chiapas, Mexico
fulviventer Anthony	Tacarcuna, Darien, Panama
Ototylomys Merriam	
phyllotis phyllotis Merriam	Tunkas, Yucatan, Mexico
phyllotis phaeus Merriam	Yohaltun, Campeche, Mexico

[1] *Fossorius*, based solely upon bones found in a cave or hole, is given no standing by Trouessart, 1898 and 1905. Its inclusion here as a living form is, of course, provisional. It may have represented fragments of *Blarinomys*.

fumeus Allen	Matagalpa, Nicaragua
guatemalæ Thomas	Tucuru, Polochie R., about 50 miles East of Coban, Guatemala

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